



Houston Police Department

NTSB PUBLIC AIRCRAFT FORUM
November 30 – December 1, 2011



Air Support Division
Lieutenant J.D. Waltmon

Mission Statement

The mission of the Houston Police Department Air Support Division is to utilize the unique resources assigned to the Air Support Division to support the broader mission of the Houston Police Department, enhancing the quality of life in the city of Houston by working cooperatively with the public to prevent crime, enforce the law, preserve the peace, and provide a safe environment. The division's primary mission is to support other divisions in the department and other local law enforcement agencies in the furtherance or completion of their overall mission and task.

History & Overview



- Implemented in 1970 as the Helicopter Patrol under the direction of a Captain, 1 Lieutenant, 1 Sergeant and 6 Police Officers with 3 piston engine Hughes 300B Helicopters.
- Aircraft used strictly for patrol flights.
- Moved into current hangar facility located at Hobby Airport in December 1974.

History & Overview

1976 – Began transition to turbine aircraft (Hughes 500C).

The Helicopter Patrol Division provided its peak level of service from the mid-1970s to the mid-1980s.

- Personnel Assigned: Manpower peaked at over 80 personnel, including pilots, tactical flight officers and support personnel
- Aircraft Assigned: 16 helicopters, (five MD500s and eleven Schweizer 300s)



History & Overview

- Current Staffing:
 - 1 Captain
 - 1 Lieutenant (Pilot)
 - 7 Sergeants (3 Pilots - 4 Tactical Flight Officers)
 - 33 Police Officers (25 Pilots, 8 Tactical Flight Officers)
 - 6 Aircraft Mechanics
- 24-hour coverage for flight availability

History & Overview

Current Fleet

Training Aircraft

- 2008 Schweizer 300C Helicopter
- 2008 Schweizer 300C Helicopter
- 2008 Schweizer 300C Helicopter

Patrol Aircraft

- | | |
|-----------------------------|-----------------------------|
| — 1990 MD 500E Helicopter | — 2008 MD 500E Helicopter** |
| — 1991 MD 500E Helicopter | — 2008 MD 500E Helicopter** |
| — 1993 MD 500E Helicopter | — 2008 MD 500E Helicopter** |
| — 2006 MD 500E Helicopter | — 2009 MD 500E Helicopter** |
| — 2008 MD 500E Helicopter** | — 2009 MD 500E Helicopter** |

Fixed Wing

- 2000 Cessna 182*

Multi-Mission

- 1986 Bell 412EP** (recently acquired)

*Equipped with 406MHz ELT

**Equipped with 406MHz ELT and wire strike protection



History & Overview

Missions

- Provide support for ground-based officers for high priority, life-threatening events
- Provide oversight and support for high speed pursuits
- Assist with perimeter control (and the avoidance of cross-fire incidents) during the pursuit of wanted suspects
- Provide live, down-linked or recorded video on major scenes and other public safety missions
- Provide flights to support search and rescue missions
- Provide traffic mobility oversight for freeway systems and major service roads

History & Overview

Missions – continued

- Support photo flights to gather evidence or support crime prevention plans
- Inspect sites identified as “critical infrastructure”
- Provide surveillance flights to support criminal investigations
- Provide flights to support dignitary protection
- Provide oversight for major incident ‘command and control’
- Respond to ‘aerial alert’ slips

History & Overview

FY 2011 Flight Activity

- Hours Flown – 6,806.3
- Calls for Service – 14,186
- Average response time – 3.70 minutes
- Vehicle pursuits supported – 252
- FLIR searches – 2,481
- Missing persons searches – 161
- Arrests – 1,082



Technology



- Thermal Imaging: FLIR 8500LP



- Digital Downlink System



- Moving Map

- Night Vision



Safety Principles

Management embraces the following safety principles:

- A safety-focused organizational safety culture.
- Continuous improvement in the level of safety.
- A non-punitive, “Just Culture” hazard identification and reporting environment.
- Safe does not mean risk free, however, take steps to mitigate risks (e.g. pre-flight risk assessments) and never take unnecessary risks.
- A reactive, proactive, and predictive risk management strategy in which everyone is responsible for the identification and management of risk.
- A Management of Change process with a specific focus on safety and risk.

Commitment to Safety

- It is important to note that the HPD ASD safety record is one of the best in the industry with 40+ years of service with no serious injuries or deaths. The Division credits this to:
 - Excellent training and maintenance.
 - All pilots are Part 61 certified commercial rotorcraft pilots.
 - Quarterly check rides for all pilots.
 - All pilots attend factory recurrent flight training biennially.
 - All crewmembers attend Helicopter Underwater Egress Training (HUET) every 3 years.
 - Recurrent NVG training.
 - All aircraft have Normal Category Standard Airworthiness Certificates.
 - All aircraft technicians are FAA certified A&P mechanics; four of the six have Inspection Authorization (IA).
 - All aircraft are maintained to at least Part 91 standards.

Commitment to Safety

Required Aircrew Equipment

- Nomex Flight Suit
- Nomex Gloves
- All-leather Black Boots
- Flight Helmet
- Shoulder Holster or Flight Vest
- Night Vision Goggles



The Accreditation Process

- In furtherance of our commitment to safety, the management of the Air Support Division believed that the Division needed to maintain and comply with a set of standards relevant to the operations and missions conducted by the Division. Management elected to utilize the accreditation standards developed by the Airborne Law Enforcement Accreditation Commission and adopted by the Airborne Law Enforcement Association as recommended best practices.
- As validation of compliance, Division management requested permission to seek an independent audit of operations in the form of ALEAC accreditation.

The Accreditation Process

- Department leaders embraced the concept of accreditation, approved the Division to begin the process, and allocated funding.
- The Division conducted an independent review and evaluation of our policies, procedures, and operations as compared to the ALEAC accreditation standards and ALEA recommended best practices.
- Found that our policies, procedures and operations were not 100% aligned with the those standards and best practices.
- Modified the non-compliant policies, procedures and operations, and added SOPs to align Division SOPs with the ALEAC standards.

The Accreditation Process

- Assigned personnel specific job descriptions such as Chief Pilot, Chief Tactical Flight Officer, and Safety Officer, and held them accountable for the position that were assigned.
- Purchased needed equipment to align with the standards.
- Expanded our Tactical Flight Officer (TFO) training program to 40-hours of classroom training and 64 practical training flights with evaluations.
- Implemented a Safety Management System (SMS) and created a Division Safety Manual.
- Implemented a mandatory pre-flight risk assessment evaluation tool.

The Accreditation Process

- Implemented Crew Resource Management Training (CRM).
- Implemented a NVG Course in compliance with FAA regulations.
- Implemented a flight following procedure.
- Implemented a Incident Review Committee.
- Implemented a hazard reporting procedure.
- Instituted a “Just Culture” work environment.
- Implemented an annual safety stand-down day.

The Accreditation Process

- Submitted all required documentation to ALEAC.
- Accreditation assessment is scheduled for December 6-8, 2011.

HPD ASD Compliance With Recent NTSB Recommendations

- A-11-56 Protected Crew Rest

Recognizing the need for protected rest periods over 25 years ago, the Air Support Division switched from rotating shifts every 4 weeks to fixed shifts with the same days off every week. Except in the rare incident of a manmade or natural disaster, aircrew members are not subject to being called in on their time off.

- A-11-57 Inadvertent Instrument Meteorological Conditions Training

The Division has submitted a training request through the Department's chain-of-command for all Division pilots to attend simulator-based IIMC Emergency Procedures Training.

HPD ASD Compliance With Recent NTSB Recommendations

- A-11-58 406 MHz Emergency Locator Transmitters (ELT)

Recognizing the need for ELTs, the specifications for all patrol and multi-mission aircraft purchased since 2008 (7 aircraft to date) have included a requirement for and been delivered with 406 MHz ELTs. Additionally, the 121.5 MHz ELT in our fixed-wing aircraft was upgraded to a 406 MHz ELT in October 2008. Division Budget Officer is seeking funding to purchase and install ELTs in other aircraft.

- A-11-59 Flight Tracking Equipment

All aircraft in the fleet are in the process of being equipped with Automatic Vehicle Locators (AVL), a GPS-based tracking device that allows anyone with a Computer Aided Dispatch (CAD) terminal to view the location of the aircraft. Aircraft location will also be displayed in the Department's Emergency Communications Center.



Houston Police Department

Preparing for Tomorrow's Houston
Today

Air Support Division